

### **Amendments to the Specification:**

Please replace the paragraph beginning on page 3, line 11 with the following amended paragraph:

Especially preferred is a ladder filter, wherein the input terminal, the output terminal, the top electrodes of the resonators together with the common terminal are arranged in a first metallization pattern with desired widths and lengths ~~length~~ of the resonators and terminal sizes and the resonator bottom electrodes are arranged in a second staggered fan-shaped metallization pattern, the effective resonator area being defined by the respective overlap of first and second metallization pattern.

Please replace the paragraph beginning on page 9, line 1 with the following amended paragraph:

According to the invention it has been found, that the above considerations are much less significant in the design of the series resonators, for which the mechanical loss is typically substantially less than the conductor loss. Thus, the resistance of the path taken by the electrical current through the chain of series resonators should be minimized. This may be achieved by making the dimension corresponding to this longitudinal direction, defined above as the resonator width,  $w$  small, with the transverse dimension, defined above as the resonator length,  $l$  being correspondingly large, so as to retain the required impedance level. In practice, there will be a limit to aspect ratio, because beyond a certain value corresponding to resonators with very narrow width the mechanical loss at  $f_r$  will become significant compared to the electric loss.

Please replace the paragraph beginning on page 10, line 20 with the following amended paragraph:

In a preferred embodiment the widths of the series resonators  $w_{\text{series}}$  are two-thirds the widths of the shunt resonators  $w_{\text{shunt}}$  and the lengths of the series resonators  $l_{\text{series}}$  are  $\neq$

one-and-a-half-times the widths of the shunt resonators  $w_{\text{shunt}}$ . FIGS. 11 and 12 show variants of the above design.

Please replace the paragraph beginning on page 10, line 24 with the following amended paragraph:

The different aspect ratios required for optimum performance of the series resonators (A) and shunt resonators (B) are taken into account in the fan-shaped layout shown. Areas on the left and right sides of the layout where the top metal does not overlap the bottom are input, output and ground pads. Typically these areas ~~area~~ have an additional thick metal layer applied. This further reduces series resistance and facilitates connections (e.g. flip-chip). Where possible edges of areas of overlap are defined by electrode edges in the top layer. For such edges, there is no physical discontinuity in the piezoelectric layer, so conversion of energy into unwanted modes should at least be minimized. The variant in FIG. 11 has elongated holes in the top layer to increase the proportion of the shunt resonator edge length defined in this way. Since holes also increase resistance they are likely to be counter-productive for the series resonators, and are therefore omitted from this part of the layout. Another variant, shown in FIG. 12, has rounded corners to further reduce abrupt physical discontinuities.

Please replace the paragraph beginning on page 11, line 31 with the following amended paragraph:

FIG. 10, 11, 12 each shows the layout of the metallization layers in one embodiment of the fan-shaped ladder ~~lattice~~ filter.